

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): June 7, 2018

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: CELRE-ERM, The Quarry - JD, LRE-2017-00645-102-A17

C. PROJECT LOCATION AND BACKGROUND INFORMATION: NE corner of Kell Road and Cedar Canyons Road

State: Indiana

County/parish/borough: Allen

City: Huntertown

Center coordinates of site (lat/long in degree decimal format): Lat. 41.23957° N, Long. -85.146189° W.

Universal Transverse Mercator: Zone 16, X655346, Y4567009

Name of nearest waterbody: Willow Creek

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Maumee River

Name of watershed or Hydrologic Unit Code (HUC): 04100003

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date: May 31, 2018

Field Determination. Date(s): August 29, 2017, March 15, 2018

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **are and are not** "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

TNWs, including territorial seas

Wetlands adjacent to TNWs

Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs

Non-RPWs that flow directly or indirectly into TNWs

Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Impoundments of jurisdictional waters

Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: 576 linear feet: width (ft) and/or 13.41 acres.

Wetlands: 0.43 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known): .

2. Non-regulated waters/wetlands (check if applicable):³

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.

Explain: **The features labeled Excavated Gravel Quarry Pond #2 (0.17ac), Excavated Gravel Quarry Pond #3 (0.05ac), and Excavated Quarry Pond #4 (0.089ac) on the revised delineation map (December 20, 2017) are open water**

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

bodies that appear to have been excavated out of non-hydric soils according to the USDA-NRCS Allen County Soil Survey. Based on a review of historical aerial photos, the area of ponds #2, #3, and #4 was farmed from 1938 (earliest available photo) up until 1999 when gravel mining activities began (Allen County GIS historical aerial photos). The last evidence of active quarry work within the review area appears in 2011 (Google Earth). At the time of the August 29, 2017 site inspection, a boat was resting on the bank of Quarry Pond #4. According to the consultant, Pond #4 contains bass (hence, the fishing boat), however there is no direct evidence that the ponds support a viable, self-sustaining fishery. The Excavated Gravel Quarry Ponds labeled #2, #3, and #4 do not meet the definition of a Water of the U.S. as defined in CFR 328.3. Based on the information reviewed the ponds are not used in interstate or foreign commerce, are not interstate waters, and do not have a nexus to interstate or foreign commerce. Review of historical aerials did not indicate that they are an impoundment of a TNW, interstate water, wetland, or a tributary. At the site visit on August 29, 2017 no evidence of a subsurface drain (i.e. standpipe) that could potentially convey water to another surface water was observed. In addition, the ponds are not separated by a berm or other man-made structure from a surface water. Therefore, Excavated Gravel Quarry Ponds #2, #3, and #4, are considered isolated and are not waters of the United States

The feature labeled Section II is a forested wetland that is 1.63 acres in size. Hydrology for the wetland is driven by precipitation in the form of rainfall, snowmelt, and surface runoff from the surrounding agricultural field and residential development. A site inspection on August 29, 2017 did not reveal any connection to surface water outlets. In addition, review of the USGS Map did not indicate the presence of surface water (RPW, non-RPW, or TNW) in the vicinity of the wetland. Review of the county drainage maps obtained from the Allen County GIS website did not indicate the presence of a subsurface connection. No evidence of a subsurface drain (i.e. standpipe) that could potentially convey water from Section II to another surface water was observed at the August 29, 2017 site inspection. In addition, the wetland is not separated by a berm or other man-made structure from a surface water. The depressional wetland does not provide for interstate or foreign commerce because it is not subject to commercial use and does not appear to be viable for future commercial use. In addition, there is no evidence that that the wetland supports recreational use. Though the wetland Section II likely provides habitat appropriate for amphibian and migratory bird reproduction, no direct evidence of breeding or young rearing at this location is known. Therefore, Section II is considered isolated and not a water of the United States.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW

Identify TNW: .

Summarize rationale supporting determination: .

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is “adjacent”:

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are “relatively permanent waters” (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: **Pick List**

Drainage area: **Pick List**

Average annual rainfall: inches

Average annual snowfall: inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **Pick List** river miles from TNW.

Project waters are **Pick List** river miles from RPW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Project waters are **Pick List** aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain: .

Identify flow route to TNW⁵: .

Tributary stream order, if known: .

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

(b) General Tributary Characteristics (check all that apply):

- Tributary is:** Natural
 Artificial (man-made). Explain: _____
 Manipulated (man-altered). Explain: _____

Tributary properties with respect to top of bank (estimate):

- Average width: _____ feet
Average depth: _____ feet
Average side slopes: **Pick List**.

Primary tributary substrate composition (check all that apply):

- | | | |
|--|--|-----------------------------------|
| <input type="checkbox"/> Silts | <input type="checkbox"/> Sands | <input type="checkbox"/> Concrete |
| <input type="checkbox"/> Cobbles | <input type="checkbox"/> Gravel | <input type="checkbox"/> Muck |
| <input type="checkbox"/> Bedrock | <input type="checkbox"/> Vegetation. Type/% cover: _____ | |
| <input type="checkbox"/> Other. Explain: _____ | | |

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: _____

Presence of run/riffle/pool complexes. Explain: _____

Tributary geometry: **Pick List**

Tributary gradient (approximate average slope): _____ %

(c) Flow:

Tributary provides for: **Pick List**

Estimate average number of flow events in review area/year: **Pick List**

Describe flow regime: _____

Other information on duration and volume: _____

Surface flow is: **Pick List. Characteristics:** _____

Subsurface flow: **Pick List. Explain findings:** _____

Dye (or other) test performed: _____

Tributary has (check all that apply):

- | | |
|---|---|
| <input type="checkbox"/> Bed and banks | |
| <input type="checkbox"/> OHWM ⁶ (check all indicators that apply): | |
| <input type="checkbox"/> clear, natural line impressed on the bank | <input type="checkbox"/> the presence of litter and debris |
| <input type="checkbox"/> changes in the character of soil | <input type="checkbox"/> destruction of terrestrial vegetation |
| <input type="checkbox"/> shelving | <input type="checkbox"/> the presence of wrack line |
| <input type="checkbox"/> vegetation matted down, bent, or absent | <input type="checkbox"/> sediment sorting |
| <input type="checkbox"/> leaf litter disturbed or washed away | <input type="checkbox"/> scour |
| <input type="checkbox"/> sediment deposition | <input type="checkbox"/> multiple observed or predicted flow events |
| <input type="checkbox"/> water staining | <input type="checkbox"/> abrupt change in plant community |
| <input type="checkbox"/> other (list): _____ | |
| <input type="checkbox"/> Discontinuous OHWM. ⁷ Explain: _____ | |

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- | | |
|--|--|
| <input checked="" type="checkbox"/> High Tide Line indicated by: | <input type="checkbox"/> Mean High Water Mark indicated by: |
| <input type="checkbox"/> oil or scum line along shore objects | <input type="checkbox"/> survey to available datum; |
| <input type="checkbox"/> fine shell or debris deposits (foreshore) | <input type="checkbox"/> physical markings; |
| <input type="checkbox"/> physical markings/characteristics | <input type="checkbox"/> vegetation lines/changes in vegetation types. |
| <input type="checkbox"/> tidal gauges | |
| <input type="checkbox"/> other (list): _____ | |

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: _____

Identify specific pollutants, if known: _____

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

(iv) **Biological Characteristics. Channel supports (check all that apply):**

- Riparian corridor. Characteristics (type, average width): .
- Wetland fringe. Characteristics: .
- Habitat for:
 - Federally Listed species. Explain findings: .
 - Fish/spawn areas. Explain findings: .
 - Other environmentally-sensitive species. Explain findings: .
 - Aquatic/wildlife diversity. Explain findings: .

2. **Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: acres

Wetland type. Explain: .

Wetland quality. Explain: .

Project wetlands cross or serve as state boundaries. Explain: .

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: .

Surface flow is: **Pick List**

Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .

- Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain: .

Ecological connection. Explain: .

Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List**.

Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: .

Identify specific pollutants, if known: .

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

- Riparian buffer. Characteristics (type, average width): .
- Vegetation type/percent cover. Explain: .
- Habitat for:
 - Federally Listed species. Explain findings: .
 - Fish/spawn areas. Explain findings: .
 - Other environmentally-sensitive species. Explain findings: .
 - Aquatic/wildlife diversity. Explain findings: .

3. **Characteristics of all wetlands adjacent to the tributary (if any)**

All wetland(s) being considered in the cumulative analysis: **Pick List**

Approximately () acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N) Size (in acres) Directly abuts? (Y/N) Size (in acres)

Summarize overall biological, chemical and physical functions being performed: .

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
 TNWs: linear feet width (ft), Or, acres.
 Wetlands adjacent to TNWs: acres.
2. **RPWs that flow directly or indirectly into TNWs.**
 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Willow Creek (Section III - 576 linear feet) is depicted as a blue line on the USGS Topographic Map, is an Allen County regulated drain, exhibits an OWHM, and flow is depicted in multiple aerial photos.
 Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: linear feet width (ft).
 Other non-wetland waters: acres.
Identify type(s) of waters: .

3. Non-RPWs⁸ that flow directly or indirectly into TNWs.

- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

- Tributary waters: linear feet width (ft).
 Other non-wetland waters: acres.
Identify type(s) of waters: .

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
 Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: **The feature labeled Section I is a forested wetland that is part of the large NWI wetland complex that is abutting/contiguous with Kell Ditch. Kell Ditch is depicted as a blue line on the USGS topographic map and has a defined bed and bank with flow depicted in multiple aerial photos. Kell Ditch is labeled as a "natural drain" on the Allen County miscellaneous drain inventory, and is part of the tributary system of the Maumee River. The feature labeled Section III represents both 576 linear feet of Willow Creek and 0.34 acres of forested wetland. As described above in Section D.2, Willow Creek exhibits an Ordinary High Water Mark and perennial flow. Willow Creek flows through the 0.34 acre forested wetland, therefore the wetland is contiguous and/or abutting Willow Creek, which is part of the tributary system of the Maumee River.**
- Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.

- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. Impoundments of jurisdictional waters.⁹

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from "waters of the U.S.," or
 Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
 Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):¹⁰

⁸See Footnote # 3.

⁹To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain: .
- Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.
Identify type(s) of waters: .
- Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
- Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: 1.11 acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: 1.63 acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Earth Source, Inc..
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: .
- Corps navigable waters' study: .
- U.S. Geological Survey Hydrologic Atlas: .
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: Hunteertown, Ind. Quad, 1:24K.
- USDA Natural Resources Conservation Service Soil Survey. Citation: May 1969 Soil Survey (USDA) Soil Conservation Service and Purdue Agricultural Experiment Station; Hydric Rating by Map Unit -Allen County, web soil survey.
- National wetlands inventory map(s). Cite name: USFWS Online Wetlands Mapper.
- State/Local wetland inventory map(s): .
- FEMA/FIRM maps: .
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)

- Photographs: Aerial (Name & Date): Google Earth Images (4/1998, 4/2002, 9/2003, 9/2005, 7/2006, 8/2007, 10/2008, 8/2010, 5/2011, 3/2014, 4/2016, and 10/2017). Allen County GIS, Historical Aerial Imagery (1938, 1957, 1964, 1972, 1986, 1995, 1999, 2003, 2006, 2008, 2009, 2012, and 2015).
or Other (Name & Date): Delineation report and Corps inspection photos August 29, 2017 and March 15, 2018.
- Previous determination(s). File no. and date of response letter: .
- Applicable/supporting case law: .
- Applicable/supporting scientific literature: .
- Other information (please specify): Allen County GIS; <http://www.acimap.us/engineering.html> .

B. ADDITIONAL COMMENTS TO SUPPORT JD:

This discussion supports section III.D.4 of this form. Section I; 0.09 acres: This feature is a forested wetland. During the August 29, 2017 site inspection a metal pipe running north to south crossing under Cedar Canyons Road was located, with its openings located in Section I and also in the NWI wetland to the south. Based on a review of aerial photos and applicable resource maps, Section I appears to be part of the larger NWI wetland complex to the south of Cedar Canyons Road. According to the USGS topographic map, Kell Ditch, a tributary to Willow Creek (and ultimately the Maumee River), runs through the large wetland complex (outside of the jurisdictional determination review area). Because man-made barriers do not sever adjacency, and Section I is part of the wetland complex that is contiguous with Kell Ditch, Section I is considered a wetland adjacent to an RPW that flows directly or indirectly into a TNW and therefore is a water of the United States.

This paragraph supports section III.D.2. and III.D.4 of this form. Section III: Willow Creek (576 linear feet) and abutting forested wetland (0.34 acre): Willow Creek exhibits an OHWM and perennial flow. Willow Creek is depicted has a blue line stream on the USGS map and the Soil Survey for Allen County also indicates that flow is perennial. In addition, flow was observed on the visit conducted on April 29, 2017 and March 15, 2018. Willow Creek is part of the tributary system of the Maumee River, a Section 10 water. Willow Creek flows through the 0.34 acres forested wetland depicted on the attached schematic. Willow Creek, an RPW, and its abutting wetlands are considered waters of the United States.

The following paragraphs support section III.D.7 of this form that the impoundment was created from waters of the United States. Excavated Gravel Quarry Pond #1; 13.41 acres: Based on a review of the May 1969 Soil Survey (USDA Soil Conservation Service and Purdue Agricultural Experiment Station) a portion of the gravel quarry pond was excavated out of Gilford Fine Sandy Loam, a hydric soil. This area of Gilford Fine Sandy Loam is abutting Willow Creek. Historical aerials photos (Allen County GIS) depicts this area of hydric soil as supporting woody vegetation in 1938 and 1957. The soil description for Gilford Fine Sandy Loam states that in the eastern extant of the series, the series is dominated by forested wetland vegetation. Thus, the 1938 and 1957 photo supports the presence of a forested wetland in area of the mapped Gilford Fine Sandy Loam. Based on this information the wetland area was adjacent to Willow Creek and was a Water of the U.S. meeting the definition of an A(7) water.

The 1964 aerial imagery indicates that earthwork began around this time period. Review of additional aerial imagery from the following years, 1972, 1986, 1995, 1999, 2003, 2006, 2008, and 2009 shows that excavation expanded and impounded water creating the pond. According to the consultant's report and the USGS topographic map the area was used to quarry gravel. It appears that the last equipment on-site and possible quarry activities occurred in 2011 (Google Earth image 5/2011). A review of aerial photos from 2012 through more recent dates do not provide evidence of active quarrying or excavation work. Therefore, active quarry work appears to have ceased around 2011.

Additionally, based on a review of topographical contours and a March 15, 2018 site inspection, the aquatic resource remains adjacent to Willow Creek. Water was flowing from "Excavated Gravel Quarry Pond #1" into Willow Creek via a defined surface connection on its west side (a cut in the bank) near the northern property line at the time of inspection. Willow Creek is a tributary of Cedar Creek, which flows to the St. Joseph River. The St. Joseph River joins the St. Mary's River to form the Maumee River, a TNW. Based on the above discussion, the 13.41 acre open water feature was partially excavated out of a jurisdictional wetland that was abutting Willow Creek. The area is no longer used for active quarry operations, and has a hydrologic connection to a downstream TNW. Therefore, the feature labeled Excavated Gravel Quarry Pond #1 is considered a water of the United States.

This paragraph supports section III.D.F. of this form that this feature is not WOTUS. Section II; 1.63 acres: Section II is a forested wetland that does not appear to have a connection to a downstream water. At the August 29, 2017 site inspection, no surface or subsurface hydrologic connection to a downstream water was located. According to the consultant and a review of applicable resource maps the wetland is an isolated depression situated within upland. Therefore, wetland Section II is considered isolated and is not a water of the United States.

The following paragraphs support section III.D.F. of this form that these features are not considered to be a Water of the U.S. Excavated Gravel Quarry Pond #2; 0.17 acres, Excavated Gravel Quarry Pond #3; 0.05 acres, and Excavated Gravel Quarry Pond #4; 0.89 acres: These smaller open water bodies appear to have been excavated out of upland during the prior quarry operations. According to the soil survey they were excavated out of non-hydric soils and historical aerial photos depicts active farming in this area. The last evidence of active quarry work within the review area appears in 2011, this is based on the 2011 Google Earth and aerial imagery from 2012. According to the consultant, a review of applicable resource maps, and the August 29, 2017 site inspection, the features labeled Excavated Gravel Quarry Pond #2; 0.17 acres, Excavated Gravel Quarry Pond #3; 0.05 acres, and Excavated Gravel Quarry Pond #4; 0.89 acres, do not have a known surface or subsurface hydrologic connection to a downstream water of the United States. They are isolated depressions located within upland. Therefore, these waters are considered isolated and are not waters of the United States.